

VIII. *Bill of Mortality for Chester for the Year 1773.* By
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Redde, Feb. 2,
1775. **T**HAT Chester is healthy to a very remarkable degree, is still more clearly evinced from the following tables, than in the register of last year. In 1772, one half of the inhabitants appeared to arrive at 20 years of age; a fact which seemed very furprising when compared with the proportional mortality in other towns, both of a larger and less size. But, according to this year's register, one half have lived to be 36 years old. In 1772, one in 15 and 3-4ths had lived to above 80, and this year 1 in 13. These are very uncommon instances of longevity for so large a proportion of the inhabitants. The inhabitants of St. Michael's parish were numbered to be 618, of whom this year ten have died; that is, a less proportion than 1 in 61. If the inhabitants of the whole city were numbered with the same accuracy as those of St. Michael's, many important conclusions, both medical and political, might with certainty be deduced from the bill of mortality. The register of burials in the nine parishes are kept separate; hence, by comparing the number of inhabitants in each parish with the burials in each, for a period of years, we may, on the most evident foundation, discern
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which part of the town is most healthy. In a political view, such an account would furnish the best means of demonstrating the accuracy of a table of the probabilities of life, formed from the register, and supply unerring *data* for calculating annuities, the value of reverſionary payments, and aſſurances on lives. Such an old town as Cheſter, where the number of inhabitants has for many years ſuffered little variation, and where the births and burials are nearly equal, is peculiarly well fitted to furniſh this important information. At the requeſt of Dr. PRICE, author of the very ingenious eſſays on annuities, &c. an improvement is made in the firſt table, by continuing the diviſion of lives into periods of five years, from 50 till 80, and from that age to the extremity of life, by marking exactly the number dying in every year; becauſe for want of ſuch a register, the law, according to which life waſtes after 80, is at preſent almoſt totally unknown, and the values of annuities on ſingle and joint lives, incapable of being calculated with any tolerable exactneſs, beyond 70 or 75. The following tables confirm the obſervation, that women live longer than men. Of thoſe who have lived to above 80, only 10 are males, and 17 females; the number of widowers this year is 17, of widows 44. The table of diſeaſes of different ages (N^o II.) confirms in general the obſervations of laſt year. It is evident that no epidemic viſited this place in 1773; not one died of the meaſles, or miliary fever, and the 10 who ſunk under the chinkcough had probably lingered under the diſeaſe
ſince

since the former year, towards the end of which it ceased to be epidemic. Only one has died of the natural small-pox; twelve were inoculated in Chester, during this year, and all recovered. In order to determine the utility of inoculation, it is necessary to ascertain, by an induction of facts, to what proportion of those who are infected, this disease is fatal in the natural way. I have received a very authentic account of the following fact, which is perhaps the more curious and instructive, as no medical practitioner whatever visited any of the patients during the whole disease: at Kelfall and Ashton, two small Cheshire villages in this part of the county, on an eminence of a dry absorbent sand rock, 69 persons have had the small-pox during the last seven months; of whom 12 have died, that is, 1 in 5 and 3-4ths. In confirmation of last year's observation it is proper to remark, that between the ages of 15 and 50, more have died of consumptions this year, than of all other diseases.

The III^d table shews, at one view, what diseases were most fatal in each month.

TABLE I. Deaths, Ages and Conditions.

Ages.	Males.	Females.	Ages.	Batches.	Husbands.	Widowers.	Maids.	Wives.	Widows.	Total.
Under 1 month —	6	4	20-25	6	1		4	1		12
Between 1-2 months	11	5	25-30	5	3		1	6		15
2-3	4	6	30-35	1	3		4	3		11
3-6	8	8	35-40	1	5		1	14		21
6-9	1	3	40-45	1	9	1	2	6	1	20
9 months and 1 year	2	8	45-50		10	1	2	1	2	17
1-2 years old	5	12	50-55	1	3	1	3	5	2	15
2-3	6	5	55-60		3	1		6	3	13
3-4	4	6	60-65	2	4	2	2	5	2	17
4-5	1	5	65-70		4	1	1	2	5	13
5-10	3	7	70-75	1	5	3		5	10	24
10-15	2	2	75-80			2	2	1	7	12
15-20	7	4	80			2	1		2	5
Total of the above ages,	66	75	81	1						1
			82		1	1			1	3
			83						2	2
			84					1	1	2
			85			1				1
			86						1	1
			87		1		1		2	4
			88					1		1
			90						1	1
			92		1				1	2
			97			1				1
			98					1	1	2
			106	1						1

Total of ages and conditions,

20 53 17 24 58 45 217

Total of ages under 20 years, { Males, 60 }
Females, 75 } 135

Total, 352

TABLE

DISEASES.

TABLE II.

Diseases of different Ages:

[illegible]

90.	90- 100.	100 & upw.	100. ai.
			33
			1
			1
			8
			1
			4
			1
			2
			1
			1
			73
			1
			7
			8
			1
			5
			69
			16
			10
			3
			1
			3
			13
6	1		62
			13
			1
			2

IV. LOCAL DISEASES.															
Cancer (G. 114.)					1								1		
Unknown diseases.	1							1							
Casualties.				2	1			2		1		1			
Total,	65	17	11	16	10	4	11	27	32	37	28	30	37	20	6

MORBORUM GENERA.

CLASSIS I. PYREXIÆ.

G. 5. 6. Typhus. Synochus.
G. 7. Apostema.
G. 7. Apostema mediastini.
G. 7. Gangræna.
G. 10. Cynanche.
G. 16. Enteritis.
G. 19. Nephritis.
Savv. G. 198. Odontalgia dentitionis.
G. 26. Variola.

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G. 33. Aphtha.

G. 35. Phthisis.

G. 37. Menorrhagia locbialis.

CLASSIS II. NEUROSES.

G. 40. Apoplexia?

G. 41. Paralysis.

G. 42. Synchope? (*puerperalis.*)

G. 43. Dyspepsia.

G. 48, 50. Convulsio. Epilepsia.

G. 52. Asthma.

G. 53. Pertussis.

G. 55. Colica.

G. 57. Diarrhæa.

G. 63. Mania.

CLASSIS III. CACHEXIÆ

G. 65. Tabes, atrophia infantilis.

G. 66. Atrophia senilis.

G. 71. 75. Ascites. Anasarca.

G. 72. Hydrocephalus.

G. 87. Icterus.

CLASSIS IV. LOCALES

G. 114. Cancer.

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		2
		2
		7
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ACHEXIÆ.

a infantilis.

s.

nafarca.

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LocALES.

TABLE

T A B L E III. Diseases of different Months.

DISEASES I. Febrile Diseases.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Fever(CULLEN's GENERA 5,6.)	1	4	6	4		5	1	2		3	1	6	33
Impofthume (G. 7.)												1	1
Angina pectoris (G. 7.)						1							1
Mortification (G. 7.)		1		1		1	1			1	1	2	8
Quinsey (G. 10.)				1									1
Infl. of the bowels (G. 16.)				1	1	1						1	4
Gravel and flone (G. 19.)					1								1
Teething (Sauv. 198)	1					1							2
Small-pox (G. 26.)										1			1
Thrush (G. 33.)					1								1
Consumption (G. 35.)	5	11	8	6	10	5	5	3	1	1	8	10	73
Hæmorrhage (G. 37.)		1											1
II. NERVOUS DISEASES.													
Sudden death (G. 40.)						1		1		2		3	7
Palfy (G. 41.)	1	1	2	2							2		8
Swoon (G. 42.)			1										1
Indigestion (G. 43.)			1	2				1	1				5
Convulsions (G. 48, 50.)	8	7	3	11	6	7	4	6	3	2	3	9	69
Asthma (G. 52.)	2	3	5	2					2			2	16
Chinkcough (G. 53.)	4	3		1				1		1			10
Colic (G. 55.)		1									2		3
Loofenefs (G. 57.)											1		1
Infanity (G. 63.)			1	1	1								3
III. DISEASES of the HABIT.													
Weaknefs of infancy (G. 65.)		2	1	1	2	2	1			1		3	13
Decay of age (G. 66.)	3	10	7	8	8	5	2		3	4	6	6	62
Dropsy (G. 71, 75.)	2		1	1	2	1		2	1		2	1	13
Dropsy of the brain (G. 72)			1										1
Jaundice (G. 87.)									1	1			2
IV. LOCAL DISEASES.													
Cancer (G. 114.)	1									1			2

IV. LOCAL DISEASES.													
Cancer (G. 114.)	1								1				2
Unknown diseases.					1					1			2
Casualties.		1				3						3	7
Total,	28	45	37	42	33	33	14	16	12	18	27	47	352

GENERAL BILL of MARRIAGES, BAPTISMS, and BURIALS.

For the YEAR 1773.

Marriages, 133. Baptisms, $\left\{ \begin{array}{l} \text{Males, } 216 \\ \text{Females, } 186 \end{array} \right\} 402$. Deaths, $\left\{ \begin{array}{l} \text{Males, } 150 \\ \text{Females, } 202 \end{array} \right\} 352$.

IX. *Experiments*

DISEASES.

TABLE II.

Diseases of different Ages.

I. FEBRILE DISEASES.	Under 1 year.	Between 1 & 2.	2-3.	3-5.	5-10.	10-15.	15-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70-80.	80-90.	90- 100.	100 & upw.	Total.
Fever (CULLEN'S GENERA) 5 6	1		1	5	3	1	1	2	6	4	4	2	3				33
Imposthume (G. 7.)							1										1
Angina pectoris (G. 7.)										1							1
Mortification (G. 7.)								2	1	1	1	1	2				8
Quinsy (G. 10.)	1																1
Infl. of the bowels (G. 16.)									3			1					4
Gravel and Stone (G. 19.)													1				1
Teething (Sauv. G. 198.)	1	1															2
Small-Pox (G. 26.)				1													1
Thrush (G. 33.)	1																1
Consumption (G. 35.)	2	1	3	1	2	3	9	15	14	16	7						73
Hæmorrhage (G. 37.)								1									1
II. NERVOUS DISEASES.																	
Sudden death (G. 40?)								1	1	2		2	1				7
Palsy (G. 41.)									1	1	2	2	2				8
Swoon? (G. 42.)									1								1
Indigestion (G. 43.)										2	3						5
Convulsions (G. 48. 50.)	50	8	3	3				1	2	1		1					69
Asthma (G. 52.)									1	1	4	4	6				16
Chinckough (G. 53.)	3	3	2	1	1												10
Colic (G. 55.)					1					1		1					3
Looseness (G. 57.)	1																1
Infanity (G. 63.)								1		1		1					3
III. DISEASES of the HABIT.																	
Weakness of infancy (G. 65.)	4	4	2	3													13
Decay of age (G. 66.)											5	12	18	20	6	1	62
Dropy G. 71. 75.								1	1	4	2	2	3				13
Dropy of the brain (G. 72.)					1												1
Jaundice (G. 87.)									1	1							2
IV. LOCAL DISEASES.																	
Cancer (G. 114.)					1								1				2
Unknown diseases.	1							1									2
Casualties.				2	1			2		1		1					7
Total,	65	17	11	16	10	4	11	27	32	37	28	30	37	20	6	1	352

MORBORUM GENERA.

CLASSIS I. PYREXIÆ.

G. 5. 6. Typhus. Synochus.
 G. 7. Apoplexia.
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 G. 16. Enteritis.
 G. 19. Nephritis.
 Sauv. G. 198. Otolalgia dentitionis.
 G. 26. Variola.

G. 33. Aphtha.
 G. 35. Phthisis.
 G. 37. Menorrhagia leucialis.
 CLASSIS II. NEUROSES.
 G. 40. Apoplexia?
 G. 41. Paralysis.
 G. 42. Syncope? (parietalis.)
 G. 43. Dyspepsia.
 G. 48. 50. Convulsio. Epilepsia.
 G. 52. Asthma.
 G. 53. Pertussis.

G. 55. Colica.
 G. 57. Diarrhœa.
 G. 63. Mania.
 CLASSIS III. CACHEXIÆ.
 G. 65. Tabes, atrophie infantilis.
 G. 66. Atrophie senilis.
 G. 71. 75. Ascites. Anasarca.
 G. 72. Hydrocephalus.
 G. 87. Icterus.
 CLASSIS IV. LOCALES.
 G. 114. Cancer.

T A B L E III. Diseases of different Months.

DISEASES I. febrile Diseases.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Fever (CULLEN'S GENERA 5, 6.)	1	4	6	4		5	1	2		3	1	6	33
Impofthume (G. 7.)												1	1
Angina pectoris (G. 7.)						1							1
Mortification (G. 7.)		1		1		1	1			1	1	2	8
Quinfey (G. 10.)				1									1
Infl. of the bowels (G. 16.)				1	1	1						1	4
Gravel and stone (G. 19.)					1								1
Teething (Sauv. 198)	1					1							2
Small-pox (G. 26.)										1			1
Thrush (G. 33.)					1								1
Consumption (G. 35.)	5	11	8	6	10	5	5	3	1	1	8	10	73
Hæmorrhage (G. 37.)		1											1
II. NERVOUS DISEASES.													
Sudden death (G. 40.)						1		1		2		3	7
Palfy (G. 41.)	1	1	2	2							2		8
Swoon (G. 42.)			1										1
Indigestion (G. 43.)			1	2				1	1				5
Convulsions (G. 48, 50.)	8	7	3	11	6	7	4	6	3	2	3	9	69
Asthma (G. 52.)	2	3	5	2					2			2	16
Chinkcough (G. 53.)	4	3		1				1		1			10
Colic (G. 55)		1									2		3
Loofenefs (G. 57.)											1		1
Infanity (G. 63.)			1	1	1								3
III. DISEASES of the HABIT.													
Weaknefs of infancy (G. 65.)		2	1	1	2	2	1			1		3	13
Decay of age (G. 66.)	3	10	7	8	8	5	2		3	4	6	6	62
Dropfy (G. 71, 75.)	2		1	1	2	1		2	1		2	1	13
Dropfy of the brain (G. 72)			1										1
Jaundice (G. 87.)									1	1			2
IV. LOCAL DISEASES.													
Cancer (G. 114.)	1									1			2
Unknown difeafes.					1						1		2
Cafualties.		1				3						3	7
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Females, 186 } 402. Deaths, { Males, 150
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